

# ABSTRACT

A method for preparing 2-deoxyaldoses on an industrial scale in which the yield or the volumetric efficiency is excellent and the operation is simple, as compared to the conventionally known preparation method. In one aspect, a compound represented by a defined formula, such as 2-keto-3-deoxygluconic acid or the like, is reduced by the catalytic hydrogenation method using a metal, such as palladium or the like, or a compound such as 2-keto-3-deoxygluconic acid or the like is reduced by using a hydride reducing agent in a solvent of not more than 30 weight times the amount of the above compound, for synthesizing 2-keto-3-deoxyaldonic acid. The 2-keto-deoxyaldonic acid is decarboxylated to obtain 2-deoxyaldoses.